## Charan Surya Nikhil Kilana

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LinkedIn GitHub

#### **EDUCATION**

The University of Texas at Dallas

M.S. Information Technology and Management

GITAM University

Bachelor of Technology

August 2023 – May 2025 **GPA 3.71** 

> July 2018 –July 2022 GPA 8.84

#### **PROFESSIONAL EXPERIENCE**

### Adroit Associates LLC (REI Client)

July 2025 - present

DevOps Engineer Intern

- Maintained and deployed EAR artifacts via Jenkins (shell-scripted stages) to IBM WebSphere Application Server.
- Supported infrastructure provisioning using Terraform (IaC) and implemented monitoring solutions for AWS cloud.
- Working closely with Dev, QA teams to ensure seamless deployment processes.

#### **Techzert Software Private Limited**

January 2022 – June 2023

DevOps Engineer

- Implemented Jenkins pipelines for Java/Python services building **Docker** images, scanned Code Quality using **SonarQube** and vulnerabilities using **Trivy** pushed to Amazon **ECR**, and deployed to Amazon **EKS** via Helm using GitOps **Argo CD**.
- Resolved Kubernetes incidents using resource right-sizing, safe rollbacks using Argo CD, and log analysis.
- Designed **Terraform modules** for infrastructure provisioning and automation, with the state file stored in **Amazon S3** and state locking enabled via **Amazon DynamoDB** preventing concurrent modifications.
- Developed and maintained **Ansible playbooks** for configuring tools like on target server.
- Integrated Jenkins and Maven to automate build processes, pushed WAR/JAR files to Nexus, containerized the application using Docker, and uploaded images to Docker Registry.
- Reduced **Docker** image sizes by up to **70%** in production by optimizing **Dockerfile** best practices, improving build speed and resource efficiency on **Linux** based systems.
- Built **Grafana** dashboards and **Prometheus alerting** to monitor stability tuned pod resources and autoscaling to improve service responsiveness.
- Implemented AWS cost optimization by developing an AWS Lambda function in Python to automatically identify and delete unattached or stale EBS snapshots automated the process using CloudWatch Events.
- Executed a **POC** with **CAST AI** on clusters to automate cost optimization achieving up to 45% reduction.
- Implemented Blue-Green deployments in Kubernetes to achieve zero-downtime production releases.

## **ACADEMIC PROJECT**

#### End to End Deployment for a Multi-Language Microservice project (LINK) (LINK)

May 2025

- Integrated **GitHub action** and **Jenkins** to automate CI for eight multi-language microservices, while building custom **Docker files** to containerize each service, pushing images to **Docker Hub**, and enabling real-time **Slack** pipeline notifications.
- Deployed workloads to Kubernetes EKS using Helm charts and ArgoCD for GitOps based delivery of stateful, stateless, and
  queue-based services, configured NGINX Ingress with AWS Application load balancer for secure external access.
- Built **Prometheus-Grafana** dashboards, configured the **EFK** stack, and improved tracing and debugging efficiency by integrating **Open Telemetry** with traces analyzed in **Jaeger**.

# Claude AI Model Context Protocol Integration (LINK)

• Developed and integrated custom **MCP servers** with **Claude AI**, enabling real-time interaction and retrieval of external data for AI-augmented workflows.

## Terraform Ansible Monolithic Project (LINK)

Jan 2025

 Automated AWS infrastructure provisioning with Terraform, implemented Ansible playbooks for configuration management deploying on Tomcat, and integrated with Jenkins for consistent deployments with centralized logging on Splunk.

#### **CERTIFICATIONS**

HashiCorp Certified Terraform Associate, AWS Certified Solution Architect, AWS Certified Cloud Practitioner

## ADDITIONAL INFORMATION

*Skills*: AWS, Python, Bash, Linux, Git, GitHub, GitLab, Jenkins, Nexus, Docker, Kubernetes, Ansible, Terraform, Prometheus, Grafana *Other Tools*: Slack, Splunk, Maven, SonarQube